Conclusion This study shows that exposure to lead and cadmium may affect semen profile in male welding workers. Further studies are need to control for other potential confounding factors, and environmental assessment should be done to asses exposure pathways and concentration.

1727f KNOWLEDGE ABOUT ADVERSE EFFECTS OF WORKING CONDITIONS MUST BE USED IN COUNSELLING BEFORE CONCEPTION AND DURING EARLY PREGNANCY

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To find and use scientific evidence about the influence of working conditions on reproductive outcomes for practical use in a guideline for occupational and a website for pregnant women, parents to be, health care professionals and policy makers. We searched the literature for evidence concerning the effects of working conditions before, and during pregnancy on pregnancy outcome and development during early childhood. The working conditions with effects on pregnancy outcome were summarised in six groups: physically or mentally heavy work, shift work, chemical substances, physical factors (like noise) and infections. We looked at the following pregnancy outcomes spontaneous abortions, preterm birth, low birth weight, hypertension and congenital malformations and learning problems at early school age. Use of evidence: A practical guideline[1] was made for occupational physicians in The Netherlands (also translated in English). It can be used by physicians in advising pregnant women and women breastfeeding their child. In another report 'Preconception care: a good beginning',[2] the chapter about working conditions underlines the effect of exposure before conception on the embryo and fetus. In the third place the evidence was used on websites[3,4] for parents to be or pregnant women and can be used for preventive measures regarding working conditions preconceptionally or during pregnancy. There is growing evidence that working conditions before and during pregnancy can increase the number and severity of pregnancy complications. There is also evidence that early intervention can prevent this increase of pregnancy complications. The available evidence has been used for a guideline for occupational physicians and on a website for parents to be in order to take preventive measures. A summary of the evidence will be presented together with examples how to use the evidence in counselling before conception and during early pregnancy.

1727g INCREASED RISKS OF CHILDHOOD CANCER AND INFANT DEATH IN THE OFFSPRING OF ELECTRONIC WORKERS

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In 1994, a hazardous waste site, polluted by the dumping of solvents from a former factory, was discovered in Taoyuan, Taiwan. The factory was built in 1970, and was in operation for the manufacturing of electronic appliances up until 1992. The objective of the study was to investigate the risks of childhood cancer and infant death in the offspring of electronic workers. We linked the databases of labour insurance, birth registration, and national cancer registry, which identified 40 647 female workers ever employed in this factory who gave 40 647 first live born singletons, and 47 of them developed cancers during 1979–2001. We also linked the databases of labour insurance, birth registration, and national death registry, identified 7202 male workers ever employed in this factory with 13 592 live born children and 81 deaths in the first year after, excluding 861 children with potential maternal exposure from the same workplace.

We demonstrated evidence on the hypotheses that maternal exposure to organic solvents near conception increases the risk of cancer in offspring and that paternal exposure during preconception relates to infant mortality and deaths due to congenital malformation.

Respiratory Disorders

1037 A CROSS-SECTIONAL STUDY TO VALIDATE A SCREENING QUESTIONNAIRE TO DETERMINE PREVALENCE OF WORK-RELATED ASTHMA IN PRIMARY HEALTH CARE IN CHILE

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Introduction The attributable population risk of work-related asthma is between 10% and 20% of total cases of asthma. In Chile, the prevalence of common asthma is 10.2% but the proportion of occupational asthma (OA) is hidden and invisible. The study objective was to determine the prevalence of OA among asthmatic patients in regular control in the Primary Health Care (PHC) adult respiratory diseases program in Santiago, Chile.

Methods A descriptive, cross-sectional multicenter study of patients aged 20 to 64 years with diagnosis of asthma, according to medical records and functional respiratory tests; who were working or had worked and were in control in PHC in a healthcare district of Santiago. An Occupational Asthma Screening Questionnaire (OAS) was developed and validated in four PHC centres to identify occupational asthma in the population in control for bronchial asthma. The screening instrument included six questions with a scale from 6 to 16 points. The instrument was prepared with a panel of experts with validation of feasibility, reliability, logic, content, construct and criteria, using confirmatory diagnostic tests and blind medical evaluation by two specialists in respiratory diseases and occupational medicine as the gold standard. Patients were classified into three categories: OA, work-exacerbated asthma WEA or common asthma (CA), according to OAS and the medical evaluation.

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